

BASIS FOR THE AMENDMENT

Claims 1, 8, 9, 17-19 and 29-40 are active in the present application. Claim 1 has been amended to further limit formula I. Claim 1 has been amended to explicitly recite the optional substitution of the phenyl and thienyl groups. Support for the amendment is found in original Claim 4. Claim 8 has been amended for clarity. Claims 17-19 have been amended for clarity. Claims 2-7, 10-16, and 20-28 have been cancelled without prejudice or disclaimer of subject matter. Claims 29-40 are new claims. Support for new Claim 29 is found in original Claim 9. Support for new Claim 30 is found on page 13, lines 3-23. Support for new Claim 31 is found on page 13, lines 9-14. Support for new Claim 32 is found on page 9, lines 4-8. Support for new Claim 33 is found on page 13, lines 9-17. Support for new Claims 34-37 is found in the last paragraph on page 13. Support for new Claim 38 is found on page 34, lines 26 and 27. Support for new Claims 39 and 40 is found in original Claim 1. No new matter is believed to have been added by this amendment.

REQUEST FOR RECONSIDERATION

Applicants have claimed a sulfonyl amino acid derivative of formula I as recited in amended Claim 1. The claimed sulfonyl amino acid derivative may be used in pharmaceutically active formulations. The claimed sulfonyl amino acid derivatives may be administered to mammals to regulate or inhibit the Jun kinase pathway as a way of treating diseases which are mediated by the JNK function.

Claim 1 is amended herein to further limit the substituents n, R<sup>3</sup> and R<sup>4</sup> and to remove the negative limitations recited in the original claims. The aryl groups of formula I are substituted or unsubstituted phenyl or thienyl groups (Ar<sup>1</sup> = phenyl and Ar<sup>2</sup> = thienyl). The connector between one of the amine groups and the Ar<sup>2</sup> group is now a methylene group (e.g., n is 1). Both R<sup>3</sup> and R<sup>4</sup> are hydrogen atoms. The amendment to Claim 1 deletes the provisos present in the original claim. Original dependent Claims 2-6, 8 and 10-16 have been cancelled.

The amendment to the claims obviates the rejections under 35 U.S.C. § 112, first and second paragraphs.

The compounds recited in dependent Claim 9 are encompassed by amended Claim 1.

The Office rejected Claims 1-8, 17-24, and 26-28 under 35 U.S.C. § 102(e) in view of a patent to Thompson (U.S. 6,503,901). The sulfonyl amino acid derivative of amended Claim 1 is nowhere disclosed in Thompson. As noted by the Examiner, R<sup>3</sup> of Example 42 of Thompson is a leucine residue. Amended Claim 1 requires that R<sup>3</sup> is a hydrogen atom. Amended Claim 1 is not anticipated by Example 42 of Thompson.

Applicants respectfully request the withdrawal of the rejection.

Claims 1-8, 17-24 and 26-28 were provisionally rejected under 35 U.S.C. § 102(e), (f) or (g) as anticipated by pending U.S. Application 09/396,523. As noted by the Examiner, compound 1241 on page 98 of EP 1 085 011 which corresponds to U.S. 09/396,523 contains

a leucine group at a position which corresponds to the R<sup>3</sup> position of present formula I.

Amended Claim 1 requires that R<sup>3</sup> is a hydrogen atom. Amended Claim 1 is not anticipated by the disclosure in EP 1 085 011 cited by the Examiner.

Applicants respectfully request the withdrawal in view of the rejection.

The Office further rejected Claims 1-8, 17-24, and 26-28 under 35 U.S.C. § 103(a) as obvious in view of the combination of Vermeulin (U.S. 6,172,261) and EP 1 085 011 (corresponding to U.S. 09/396,523). The Office has cited to compound number 45 in Figure 2/5 of Vermeulin, and compounds 1233, 1241 and 1340 on pages 97 and 98 of EP 1 085 011 as support for the rejection. It appears that the Office has made the rejection on the grounds that the Vermeulin patent and EP 1 085 011 teach "structurally similar compounds" and that one of ordinary skill in the art in possession of the two references would be in possession of the claimed compounds for treating tumor.

Applicants note that none of the compounds cited by the Examiner in Vermeulin or EP 1 085 011 meets the claim limitation of formula I of present Claim 1. Example 45 of Vermeulin requires that n in formula I is 5. A pentylene group does not render obvious a methylene group. (See for example *In re Jones* 21 USPQ2d 1941 (CAFC 1992). With regard to compounds 1241 and 1340 of EP 1 085 011, each of these compounds appears to contain a branched alkyl group between the amine and a carbonyl of formula I. Since R<sup>3</sup> and R<sup>4</sup> are required to be hydrogen groups in amended Claim 1, compounds 1241 and 1340 cannot render obvious the claimed sulfonyl amino acid derivative which contains only an unsubstituted methylene group (-CH<sub>2</sub>-) at this position. Compound 1233 contains a hydrogen atom and a polyamine moiety at positions which may correspond to the R<sup>5</sup> and R<sup>6</sup> positions of present formula I. Formula I of Claim 1 does not include polyamine groups at what corresponds to the R<sup>6</sup> position in the 1233 molecule disclosed in EP 1 085 011. The polyamine group of formula 1233 of EP 1 085 011 does not render obvious R<sup>5</sup> (which may be

Application No. 10/088,090  
Reply to Office Action of July 8, 2003

a hydrogen atom or a substituted or unsubstituted C<sub>1</sub>-C<sub>6</sub>-alkyl group) or R<sup>6</sup> (which may be a hydrogen, substituted or unsubstituted C<sub>1</sub>-C<sub>6</sub>-aliphatic alkyl group or one of a number of unsubstituted cyclic C<sub>4</sub>-C<sub>8</sub> alkyl groups or a substituted or unsubstituted aryl group).

Therefore, compound 1233 of EP 1 085 011 may not render obvious the compounds encompassed by formula I of amended Claim 1.

Claims 29-40 are new claims. New Claims 30-38 are drawn to methods comprising administering the sulfonyl amino acid derivative of Claim 1, or a pharmaceutically acceptable preparation thereof, to a mammal. Upon finding the subject matter of amended Claim 1 allowable, the Examiner is respectfully requested to allow the new claims since a method of using a compound must be patentable if the compound is patentable.


Applicants submit the amendment to the claims places all now-pending claims in condition for allowance. Applicants respectfully request the withdrawal of the rejections and the passage of all now-pending claims to Issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)  
NFO/SUK/cja

  
\_\_\_\_\_  
Norman F. Oblon  
Attorney of Record  
Registration No. 24,618

Stefan U. Koschmieder  
Registration No. 50,238